	Application No.	Applicant(s)
Notice of Allowability	10/681,405	WELLAND ET AL.
	Examiner	Art Unit
	Tilahun B. Gesessse	2684
The MAILING DATE of this communication apperall claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313  1. This communication is responsive to 4/21/05.  2. The allowed claim(s) is/are 3-26.  3. The drawings filed on 08 October 2003 are accepted by the decision of the decision of the certified copies of the priority documents have compared to the priority documents have and copies of the certified copies of the priority documents have and copies of the certified copies of the priority documents have and copies of the certified copies of the priority documents have and copies of the certified copies of the priority documents have and copies of the certified copies of the priority documents have and copies of the certified copies of the priority documents have and copies of the certified copies of the priority documents have	ears on the cover sheet with the county (OR REMAINS) CLOSED in this apported or other appropriate communication GHTS. This application is subject to and MPEP 1308.  December 25 U.S.C. § 119(a)-(d) or (f).  December 12 been received.  December 13 been received in Application No.	orrespondence address plication. If not included n will be mailed in due course. THIS o withdrawal from issue at the initiative
International Bureau (PCT Rule 17.2(a)).  * Certified copies not received:  Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		
5. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.		
<ul> <li>6. CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.</li> <li>(a) including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached</li> <li>1) hereto or 2) to Paper No./Mail Date</li> <li>(b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date</li> <li>Identifying Indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).</li> <li>7. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.</li> </ul>		
<ul> <li>Attachment(s)</li> <li>1. ☐ Notice of References Cited (PTO-892)</li> <li>2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)</li> <li>3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/O Paper No./Mail Date 10/8/03 &amp; 11/24/03</li> <li>4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material</li> </ul>	· 6. ☐ Interview Summary Paper No./Mail Da 8), 7. ☐ Examiner's Amenda	Patent Application (PTO-152)  (PTO-413), te ment/Comment ent of Reasons for Allowance

Application/Control Number: 10/681,405 Page 2

Art Unit: 2684

## **DETAILED ACTION**

## Status of claims

1. This is in response to applicant's amendment and argument filed April 21, 2005, in which claims 1-2 have been deleted and claims 3-26 are pending.

After further search and thorough examination of the present application and in view of applicant's argument, claims 3 through 26 are found to be in condition for allowance.

## Allowable Subject Matter

2. The following is an examiner's statement of reasons for allowance: the prior art Madin (US 5686864) discloses phase locked loop circuitry (104) for generating an output signal at a variable output frequency (figure 1 and 5), a controllable oscillator (1 12,502) having an output signal at an output frequency dependent upon a plurality of different analog control signals, the single of different analog control signals being received by the controllable oscillator as different frequency control input signals such that at least some of the plurality of control signals are configured to individually control the controllable oscillator without being combined with others of the plurality of control signals (see column 1 line 63-column 3, line 30 and column 5, line 42-column 6, line 8 and figures 1 and 5) and phase difference control circuit configured to concurrently provide the plurality of different analog control signals as outputs, the plurality of different analog control signals as outputs, the plurality of different analog control signals heing generated from a phase difference between at least two input signals (see figures 1 and 5 and column 1 line 68-column 2 line 20), wherein the controllable oscillator comprises a plurality of non-varactor diode

Application/Control Number: 10/681,405 Page 3

Art Unit: 2684

capacitance circuits connected in parallel to contribute a combined capacitance amount that determines at least in part the output frequency of the controllable oscillator, the single of different analog control signals from the phase difference control circuitry being coupled to control the amount of capacitance contributed by the plurality of capacitance circuits (column 5, line 59-column 6, line 8 and figure 6).

On the other hand, the present application specifically teaches a sample and hold circuit coupled to sample each of the <u>plurality of different analog output</u> signals from the phase detector and to hold a plurality of different sampled analog output signals, the plurality of <u>different sampled analog output signals</u> from the sample and hold circuit being used to provide the plurality of different analog control signals for the controllable oscillator. These limitations in conjunction with all other limitations of the independent claims have not been disclosed, taught or made obvious over the prior art of record. And see applicant's argument filed page 8, second paragraph through page 9, fourth paragraph.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tilahun B Gesesse whose telephone number is 571-272-7879. The examiner can normally be reached on flex.

Application/Control Number: 10/681,405 Page 4

Art Unit: 2684

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 571-272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-2738300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TILAHUN GESESSE PRIMARY EXAMINER